What is claimed is:

1. Surgical apparatus for harvesting a vessel from the body of a patient, comprising:

an elongated endoscope having a rigid outer housing and an inner cross section containing optical apparatus disposed between distal and proximal ends of the outer housing for providing visualization at the proximal end of objects within a field of view forward of the distal end; and

a surgical utilization device including a blunt transparent tip having tapered outer walls for detachable attachment at the distal end of the endoscope and operable upon attachment and upon forward movement through tissue for bluntly dissecting tissue contiguous the tapered outer walls within the field of view from the distal end of the endoscope.

2. Surgical apparatus as in claim 1 in which the utilization device includes a substantially ovaloidal rigid protrusion disposed substantially surrounding the endoscope at a location proximal the tapered outer walls of the blunt transparent tip for dilating tissue bluntly dissected thereby in response to axial movement through tissue.

3. Surgical apparatus as in claim 2 in which the protrusion includes faceted surfaces adjacent the tapered walls forming a plurality of ridges that extend rearwardly from a forward portion of the protrusion.

4. Surgical apparatus as in claim 1 in which the utilization device includes threads for mating threaded attachment to the distal end of the endoscope.

5. Surgical apparatus as in claim 4 in which the distal end of the endoscope includes a distal segment of diameter smaller than the diameter of the outer housing of the endoscope and including threads thereon for mating engagement with threads carried by the utilization device;

the distal end of the endoscope also including an intermediate segment of diameter greater than the diameter of the distal segment and smaller than the diameter of the outer housing for coaxial alignment of the intermediate segment with a mating segment of the utilization device.

6. Surgical apparatus comprising:

an elongated endoscope including a rigid outer housing having an inner cross section containing optical apparatus disposed in coaxial alignment with the outer housing between distal and proximal ends of the outer housing for providing visualization at the proximal end of objects within a field of view forward of the distal end; and

the distal end of the outer housing including an attachment structure disposed in coaxial alignment with the outer housing for mating attachment thereto of selected surgical utilization devices.

7. Surgical apparatus as in claim 6 including a utilization device for dissecting tissue in response to axial movement thereof through tissue.

8. Surgical apparatus as in claim 7 in which the utilization device includes transparent tapered walls disposed within the field of view forward of the distal end of the outer housing for contiguous engagement with tissue being dissected; and

said utilization device includes a threaded portion for mating engagement with a threaded attachment structure near the distal end of the outer housing.

9. Surgical apparatus as in claim 6 in which the utilization device includes a longitudinal extension forward of the distal end of the outer housing and including an aperture therein for carrying a suture therethrough within the field of view forward of the distal end.

10. Surgical apparatus as in claim 6 in which the utilization device includes a longitudinal extension forward of the distal end having a yoke attached thereto for traversing along a vessel of interest within the field of view forward of the distal end.

11. Surgical apparatus as in claim 6 in which the utilization device includes a longitudinal extension forward of the distal end having a

hook-like appendage attached thereto for manipulating a vessel of interest within the field of view forward of the distal end.

12. Surgical apparatus as in claim 8 in which the utilization device includes a rigid substantially ovaloidal protrusion disposed proximal the tapered walls for substantially surrounding the outer housing to dilate tissue dissected by the tapered walls in response to axial movement thereof through dissected tissue.

13. Surgical apparatus according to claim 6 comprising:

a tool cannula positionable over a portion of the outer housing and supporting a surgical effector device at a distal end of the tool cannula, the tool cannula including a control device that is supported near a proximal end of the tool cannula and that is operatively linked to the surgical effector device at the distal end for manipulating tissue within the field of view of the endoscope in response to manual actuation of the control device.

14. Surgical apparatus according to claim 6 in which the endoscope preserves optical characteristics relative to lateral deflection from coaxial alignment with the outer housing to about 22% of the length thereof.

15. Surgical apparatus according to claim 6 in which the endoscope preserves optical characteristics during lateral deflection from coaxial alignment with the outer housing to about 10% of the length thereof.

16. Surgical apparatus as in claim 6 in which the outer housing has a diameter of about 7 mm, and a distal segment of the outer housing has a diameter of about 5 mm.

17. Surgical apparatus as in claim 16 in which the outer housing includes an intermediate segment proximal the distal segment of diameter greater than the distal segment and less than the outer housing; and

the distal segment includes threads thereon as the attachment structure for making attachment thereto of the selected surgical utilization devices.

18. Apparatus for selective positioning over a portion of the length of an endoscope for selectively performing tissue manipulation in the body of a patient, the apparatus comprising:

an elongated cannula having distal and proximal ends and having an inner bore therebetween of diameter sized to slidably and rotatably receive an endoscope therein;

a surgical effector device affixed to the cannula near the distal end thereof for rotation with the cannula about an endoscope received therein and disposed for selective movement relative to the distal end of the cannula; and

a control member supported by the cannula near the proximal end thereof and linked to the surgical effector device for selective actuation

thereof to manipulate tissue near the distal end of the cannula within a field of view of an endoscope disposed therein in response to manual actuation of the control member.

19. Apparatus as in claim 18 including a handle structure attached to the cannula near the proximal end thereof and supporting the control member thereon for movement relative to the cannula and handle structure linked through the cannula to the surgical effector device.

20. Apparatus as in claim 19 including a vessel retractor as the surgical effector device supported by the cannula for slidable deployment and retraction relative to the distal end of the cannula in response to actuation of an control member supported on the handle structure and linked through the cannula to the vessel retractor.

21. Apparatus as in claim 19 in which the handle structure includes a proximal segment and a distal segment that is rotatably attached to the proximal segment, the proximal segment being selectively attachable to an endoscope for fixed orientation relative thereto, and the distal segment supporting the cannula and control member for rotation about the proximal segment and an endoscope attached thereto.

22. Apparatus as in claim 21 in which the distal segment of the handle structure includes a retractor actuator slidably mounted therein for

longitudinal movement relative to the cannula linked therethrough to a vessel retractor as a surgical effector device that is disposed for deployment and retraction relative to the distal end of the cannula.

23. Apparatus as in claim 21 in which the distal segment of the handle structure includes a compound actuator mounted for longitudinal slidable movement relative to the cannula and carrying a pivot thereon transversely oriented relative to the direction of longitudinal slidable movement;

a lever supported on said pivot;

a tissue-shearing device as a surgical effector device slidably supported by the cannula near the distal end thereof; and

links within the cannula coupled to the compound actuator and lever for selectively slidably deploying and retrieving the tissue-shearing device, and for actuating the tissue-shearing device in deployed position in response to selective manual manipulations of the compound actuator and lever.

24. Apparatus as in claim 23 in which one of the compound actuator and link therefrom to the tissue-shearing device retains the tissue-shearing device in fixed angular orientation relative to the cannula during movement of the tissue-shearing device.

25. Apparatus as in claim 23 in which the links to the tissue-shearing device include a hollow body coupled to the compound actuator; and

an actuator rod disposed for movement within the hollow body coupled to the lever.

26. Apparatus as in claim 23 in which the tissue-shearing device includes a pair of blades pivotally mounted on one of the links within the cannula for sliding movement relative to the cannula, and for scissor movement about the pivotal mount in response to actuation via another of the links within the cannula.

27. Apparatus as in claim 18 in which the surgical effector device includes a blade mounted for movement relative to the distal end of the cannula for severing tissue in response to actuation of the control member.

28. Apparatus as in claim 27 in which the surgical effector device includes a vessel-confining structure disposed forward of the distal end of the cannula and linked with the blade for retaining and severing a vessel confined within the vessel-confining structure in response to manual manipulation of the control member linked to the blade.

29. Apparatus according to claim 18 in which the surgical effector device includes tissue-shearing apparatus supported by the cannula and

selectively deployable from the distal end thereof for selective manipulation in response to manual actuation of the control member supported by the cannula at the proximal end thereof.

30. Apparatus according to claim 29 in which the tissue-shearing apparatus includes a pair of scissor blades pivotally mounted for relative rotational motion thereabout in contiguous orientation in response to the manual actuation of the control member.

31. Apparatus according to claim 18 in which the surgical effector device includes a pair of mating edges carried on at least one element disposed for coaxial relative rotation and axial deployment from the distal end of the cannula for selectively manipulating tissue between the mating edges in response to actuation of the control member.

32. Apparatus according to claim 18 comprising:

a plurality of surgical effector devices supported by the cannula near the distal end thereof, each for different manipulations of tissue;

a plurality of control members supported by the cannula near the proximal end thereof, each linked to a respective one of the plurality of surgical effector devices for selective actuation thereof to manipulate tissue differently near the distal end of the cannula in response to manual actuation of the respective control member.

33. Apparatus as in claim 32 in which one of the surgical effector devices includes a cutting device capable of cutting tissue near the distal end of the cannula in response to manual actuation of the control member near the proximal end of the cannula; and

another of the surgical effector devices includes a retractor configured to engage a vessel for the displacement thereof laterally relative to the distal end of the cannula in operable position slidably extended forward of the distal end of the cannula.

34. Apparatus as in claim 33 in which the retractor is deployed with the cutting device to displace a vessel laterally relative to the distal end of the cannula in the operable positions of the retractor and cutting device forward of the distal end of the cannula.

35. Apparatus as in claim 30 including a perimeter electrode disposed about and spaced away from the scissor blades for contacting tissue to be severed by the scissor blades; and

electrical connections to the perimeter electrode and to at least one of the scissor blades for application of electrocautery signals thereto.

36. Apparatus as in claim 35 in which the perimeter electrode is disposed substantially within a plane that is substantially parallel to the pivot axis of the blades.

37. Apparatus as in claim 30 including electrodes formed on each of the pair of scissor blades;

said control member is mounted on a handle structure including a distal segment that is attached to the cannula;

said handle structure including a proximal segment that is rotatably attached to the distal segment and that attaches in fixed orientation to an endoscope received therein; and

electrical conductors connected between the electrodes on each of the blades through the cannula to external connections disposed on one of the distal and proximal segments of the handle structure.

38. Apparatus as in claim 37 including rotatable electrical connections between the proximal and distal segments of the handle structure; and

the external connections are disposed in the proximal segment of the handle structure, connected to the electrodes on the blades through the rotatable electrical connections and the electrical conductors.

39. Apparatus according to claim 32 including a plural number of inserts disposed within the cannula to form lumens within the cannula in which links are disposed between each of the surgical effector devices and the control members therefor.

40. Apparatus according to claim 18 for operation within an insufflated anatomical space, comprising:

a gas-tight seal within the cannula including a number of apertures therethrough for forming sliding, substantially gas-tight seals about an endoscope received within the sheath and about each link between a surgical effector device near the distal end of the cannula and a control member therefor near a proximal end of the cannula.

41. Apparatus as in claim 18 for operation within an insufflated anatomical space, comprising:

a gas seal including a hollow barrel having an internal bore therethrough and having an inflatable balloon disposed about an outer perimeter of the barrel near a distal end thereof, the barrel including a resilient sliding seal disposed over the internal bore at a proximal end of the barrel and resiliently surrounding the cannula to form a sliding, substantially gas-tight seal therewith.

42. Apparatus as in claim 6 comprising:

a gas seal including a hollow barrel having an internal bore therethrough and having an inflatable balloon disposed about an outer perimeter of the barrel near a distal end thereof, the barrel including a resilient sliding seal disposed over the internal bore at a proximal end of the

barrel and resiliently surrounding the outer housing to form a sliding substantially gas-tight seal therewith.

43. A method of dissecting a vessel within the body of a patient using a dissecting endoscope having a rigid, elongated outer housing enclosing optical apparatus between distal and proximal ends of the outer housing for providing visualization at the proximal end of objects within a field of view forward of the distal end, and including an attachment structure near the distal end of the outer housing, the method comprising:

forming an incision to expose the vessel;

advancing through the incision and along the course of the vessel the dissecting endoscope having a rigid tissue-dissecting tip having tapered transparent walls for contiguous engagement with tissue being dissected, and including a rigid tissue dilator having greater outer diameter than the outer housing and disposed thereabout at a location proximal the tapered walls attached to the attachment structure at the distal end of the dissecting endoscope for bluntly dissecting tissue from the vessel and for dilating the dissected tissue to form an anatomical space in the dilated tissue about the vessel in response to forward movement of the rigid tip and dilator through tissue for exposing side-branch vessels thereof under visualization through the dissecting endoscope;

transecting the side branches within the anatomical space along a portion of the vessel; and

severing the portion of vessel for use as a bypass conduit.

44. The method as in claim 43 including removing the dissecting endoscope from the anatomical space;

reconfiguring the distal end of the dissecting endoscope including removing the rigid tip from the attachment structure at the distal end of the dissecting endoscope; and

reinserting the reconfigured dissecting endoscope into the anatomical space for surgically manipulating tissue therein.

45. The method as in claim 43 including a step of directly attaching to the attachment structure a rigid tissue-dissecting tip having transparent tapered walls and a rigid substantially ovaloidal tissue dilator disposed proximal the tapered walls to surround the dissecting endoscope near the distal end thereof for dilating dissected tissue in response to axial movement through dissected tissue along the course of the vessel.

46. The method as in claim 45 including in the step of directly attaching, attaching to the attachment structure a rigid tissue dissecting tip having transparent tapered walls and a rigid substantially ovaloidal tissue dilator having faceted forward surfaces forming ridges thereon oriented

substantially axially, the tissue dilator being disposed proximal the tapered walls to surround the dissecting endoscope near the distal end thereof for dilating dissected tissue in response to axial movement and axial rotation of the dissecting endoscope through dissected tissue along the course of the vessel.

47. A method of dissecting a vessel within the body of a patient using a dissecting endoscope selectively configurable with an overlying cannula supporting a surgical effector device, the method comprising:

forming an incision to expose the vessel;

advancing the dissecting endoscope through the incision and along the course of the vessel to bluntly dissect tissue therefrom for forming an anatomical space about the vessel and exposing side-branch vessels thereof under visualization through the endoscope;

removing the dissecting endoscope from the anatomical space for reconfiguration thereof to include the overlying cannula disposed about a portion of the length of the endoscope;

inserting into the anatomical space the reconfigured dissecting endoscope and overlying cannula for manipulating with the surgical effector device supported by the cannula any side-branch vessels exposed within the

anatomical space along the course of the vessel under visualization through the dissecting endoscope; and

severing the vessel for use as a bypass conduit.

48. The method according to claim 47 including deploying the surgical effector device from the distal end of the overlying cannula for severing side-branch vessels exposed within the anatomical space along the course of the vessel.

49. The method according to claim 48 including also deploying from the distal end of the overlying cannula a vessel retractor for selectively displacing the vessel during severing of side branches therefrom under visualization through the dissecting endoscope.

50. The method according to claim 48 in which the surgical effector device includes bipolar scissors, and the method includes electrocauterizing side-branch vessels contacted by the bipolar scissors prior to the severing thereof under visualization through the dissecting endoscope.

51. The method according to claim 48 including selectively rotating the overlying cannula about the dissecting endoscope to position the surgical effortor device for severing side-branch vessels under visualization within the field of view of the dissecting endoscope.

52. The method according to claim 47 performed with a gas-tight sliding seal for confining insufflation of the anatomical space, the method comprising:

installing the gas-tight seal within the incision;

advancing the dissection endoscope includes the advancement thereof through the incision and the gas-tight sliding seal installed therein to perform the blunt tissue dissection; and

the insertion of the reconfigured dissection endoscope with the overlying cannula includes the insertion thereof through the gas-tight sliding seal installed in the incision; and includes

supplying gas under pressure to the anatomical space bounded by the gas-tight seal.

53. The method as in claim 47 including installing a sliding gas-tight seal about the dissecting endoscope prior to advancing the dissecting endoscope; and

installing the seal in gas-tight orientation within the incision.

54. A kit of surgical apparatus for harvesting a vessel from the body of a patient, comprising:

a cannula having a bore therethrough for slidably and rotatably receiving therein a portion of the length of an endoscope, the cannula having

proximal and distal ends and supporting a surgical effector device near the distal end thereof and a control member linked thereto and supported near the proximal end of the cannula for selective manipulation in response to manual actuation of the control member;

a container having upper and lower separable portions housing the cannula; and

an envelope of impervious material sealed about the container to exclude contaminants.

55. A kit of surgical apparatus as in claim 54 including a carton surrounding the envelope for protection thereof and of the container and components therein.

56. The kit of surgical apparatus as in claim 55 including within the carton within a sealed housing a gas seal including a body having distal and proximal ends and having a bore therethrough between the ends, and including an inflatable balloon disposed about an outer periphery of the body near the distal end thereof, and including a resilient sliding seal disposed over the bore at the proximal end for forming a gas-tight seal about the cannula.

57. A tissue-dissecting endoscope comprising:

a rigid housing of elongated dimension between distal and proximal ends thereof, and including an optical system within the entire interior of the housing for translating an optical image viewable near the distal end to a viewing port at the proximal end;

an attachment structure disposed near the distal end of the housing for selective attachment and removal of surgical effector devices;

a rigid tip attachable to the attachment structure near the distal end of the housing and having transparent tapered walls converging toward a blunt tip forward of the distal end for bluntly dissecting tissue in contact with the tapered walls in response to advancement of the tip and housing through tissue.

58. The tissue-dissecting endoscope according to claim 57 in which the tip includes a tissue dilator of greater diameter than the diameter of the housing disposed to surround the housing at a location proximal the tapered walls, the tissue dilator being selectively and detachably engaged with the attachment structure to retain the tissue dilator in position near the distal end of the housing.

59. The tissue-dissecting endoscope according to claim 57 in which the attachment structure includes threads for engagement with mating threads of a surgical effector device.

60. The tissue-dissecting endoscope according to claim 59 in which the housing includes a distal segment of reduced diameter having the threads thereon, and includes an intermediate segment of diameter greater than the diameter of the distal segment and less than the diameter of the housing disposed adjacent the distal segment for axially aligning a mating segment of the rigid tip.

61. The tissue-dissecting endoscope according to claim 57 in which the housing preserves optical characteristics relative to lateral deflection from coaxial alignment with the housing to about 22% of the length thereof.

62. The tissue-dissecting endoscope according to claim 57 in which the housing preserves optical characteristics during lateral deflection from coaxial alignment with the housing to about 10% of the length thereof.

63. The tissue-dissecting endoscope according to claim 57 in which the housing has substantially cylindrical cross section over the length between distal and proximal ends thereof, and includes a distal segment of reduced diameter and an adjacent intermediate segment of diameter greater than the diameter of the distal segment and less than the diameter of the housing.

64. Surgical apparatus comprising:

endoscope means including a rigid housing containing optical elements for remotely viewing from a proximal end thereof objects within a field of view at a distal end thereof; and

attachment means near the distal end of the housing for selective attachment thereto of surgical utilization devices.

65. Surgical apparatus as in claim 64 in which the attachment means includes threads disposed near the distal end; and comprising:

tissue-dissecting means attached to the attachment means as a surgical utilization device for bluntly dissecting tissue in response to movement thereof through tissue.

66. Surgical apparatus as in claim 64 in which the tissue-dissecting means includes a rigid structure having tapered transparent walls disposed within the field of view of the endoscope means for providing visualization at the proximal end thereof of the dissection of tissue contiguous the transparent walls of the tissue-dissecting means.

67. Surgical apparatus comprising:

endoscope means for remotely viewing from a proximal end thereof objects within a field of view at a distal end thereof;

elongated cannula means for attachment to the endoscope means along a portion between the proximal and distal ends thereof to support a

number of surgical utilization devices thereon near a distal end of the cannula means for manipulation within the field of view of the endoscope means; and

control means disposed near a proximal end of the cannula means and linked to a number of the surgical utilization devices near the distal end for manipulating the number of utilization devices in response to manual actuation of the control means.

68. Surgical apparatus as in claim 67 in which the endoscope means is rotatably mounted to the cannula means; and

the control means are mounted in fixed angular orientation to the cannula means for manipulating the number of surgical utilization devices at various angular orientations relative to the endoscope means.

69. Surgical apparatus as in claim 68 in which one of the number of surgical utilization devices includes tissue-shearing means mounted for selective deployment and retraction relative to the distal end of the cannula means for selective manipulation within the field of view of the endoscope means to sever tissue in response to manual actuation of the control means disposed near the proximal end of the cannula means.

70. Surgical apparatus as in claim 69 in which the control means includes a lever means that is pivotally mounted on a slider means that is

slidably supported on a handle means that is attached near the proximal end of the cannula means;

said slider means being linked to the shearing means for axially extending and retracting the shearing means relative to the distal end of the cannula means in response to axial slidable movement of the slider means; and

said lever means being linked to the shearing means for operationally actuating the shearing means to shear tissue in response to manual actuation of the level means about the pivotal mount therefor.

71. Surgical apparatus as in claim 70 in which the shearing means is mounted for slidable deployment and retraction in fixed angular orientation relative to the distal end of the cannula means.

72. Surgical apparatus according to claim 67 including a plural number of different surgical utilization devices mounted for deployment and retraction relative to the distal end of the cannula means; and including

a plural number of control means linked to corresponding surgical utilization devices for the manipulation thereof in response to manual actuations of the corresponding control means.

73. Surgical apparatus as in claim 72 in which one of the surgical utilization devices includes tissue-shearing means, and another of the

surgical utilization devices includes vessel retractor means for displacing a vessel in relation to tissue to be sheared in response to manual actuation of corresponding control means.

74. Surgical apparatus as in claim 69 in which the tissue-shearing means includes a pair of elements that form electrodes to receive bipolar signals thereon for electrocauterizing tissue to be sheared in response to bipolar signals supplied to the pair of elements.

75. Surgical apparatus as in claim 67 including hollow access means for introduction into an incision in the body of a patient to form a fluid-tight seal therein, and to receive therethrough at least the cannula means for the manipulation of tissue therewith within the body of the patients; and

seal means attached to the access means for forming a fluid-tight sliding seal therewith to support insufflation within the incision.

76. Surgical apparatus as in claim 64 in which the attachment means includes at least one lateral protrusion on one of the housing near the distal end thereof and a surgical utilization device for attachment thereto, and including a mating recess on the other of the housing and surgical utilization device for selective attachment and detachment of the surgical utilization device with respect to the distal end of the housing in response to

mechanical manipulation of the surgical utilization device relative to the housing.

77. Surgical apparatus as in claim 76 in which one of the protrusion and mating recess is disposed on attachment lever means mounted on a surgical utilization device for manual actuation thereof to selectively engage and disengage the protrusion and mating recess for retaining and releasing the surgical utilization device with respect to the housing.

78. A kit of surgical apparatus for performing surgical procedures, the kit comprising:

elongated cannula means having a bore therethrough between distal and proximal ends thereof for receiving an endoscope therein, the cannula means supporting a number of surgical utilization devices near distal end thereof for selective manipulation in response to a number of control means supported near the proximal end and each linked to corresponding surgical utilization device;

container means enclosing the cannula means; and

envelope means disposed about the container means to form an hermetic seal thereabout and maintain a sterile environment therein.

79. The kit according to claim 78 including carton means disposed about the envelope means and including therein within another sealed

envelope means access port means for introduction into an incision in the body of a patient to form a fluid-tight seal therein, and configured with a bore therethrough to receive the cannula means therein; and

seal means for attachment to the access port means to form therewith a sliding fluid-tight seal about the cannula means.

80. A method of dissecting an artery that substantially aligns along a portion of the course thereof with an auxiliary vessel within the body of a patient using a dissecting endoscope having a rigid, elongated outer housing enclosing optical apparatus between distal and proximal ends of the outer housing and including a transparent blunt tissue dissecting tip at the distal end for providing visualization at the proximal end of objects within a field of view forward of the distal end, the method comprising:

forming an incision to expose the artery and auxiliary vessel;

advancing the dissecting endoscope through the incision and along the course of the auxiliary vessel to bluntly dissect tissue therefrom for forming an anatomical space about the auxiliary vessel and artery in response to forward movement of the tip through tissue for exposing tributary vessels of the auxiliary vessel and artery under visualization through the dissecting endoscope;

transecting the tributary vessels within the anatomical space;

ligating the auxiliary vessel and artery near an end of the portion; and

severing the auxiliary vessel and artery for use of the artery as a bypass conduit.

81. A method of dissecting an artery that substantially aligns along a portion of the course thereof with an auxiliary vessel within the body of a patient using a dissecting endoscope selectively configurable with an attachable cannula supporting a surgical effector device, the method comprising:

forming an incision to expose the artery and auxiliary vessel;

advancing the dissecting endoscope through the incision and along the course of the auxiliary vessel to bluntly dissect tissue therefrom and from the artery aligned therewith for forming an anatomical space about the auxiliary vessel and artery and exposing tributary vessels of the artery and the auxiliary vessel under visualization through the endoscope;

removing the dissecting endoscope from the anatomical space for reconfiguration thereof to include the cannula attached to a portion of the length of the endoscope;

inserting into the anatomical space the reconfigured dissecting endoscope and cannula for manipulating with the surgical effector device supported by the cannula the exposed tributary vessels of the auxiliary vessel

and artery within the anatomical space under visualization through the dissecting endoscope;

ligating the auxiliary vessel and artery near an end of the portion;

severing the vessel for use as a bypass conduit.

82. The method according to claim 81 performed with a gas-tight sliding seal for confining insufflation of the anatomical space, the method comprising:

installing the gas-tight seal within the incision;

advancing the dissection endoscope through the incision and the gas-tight sliding seal installed therein to perform the blunt dissection of tissue along the course of the auxiliary vessel and artery;

the insertion of the reconfigured dissection endoscope with attached cannula includes the insertion thereof through the gas-tight sliding seal installed in the incision; and includes

supplying gas under pressure to the anatomical space bounded by the gas-tight seal.

83. A method of dissecting a radial artery accompanied by venae comitantes along the course of the radial artery in the forearm of a patient using blunt-tip tissue dissection, the method comprising:

occluding flow of blood through the radial artery and venae comitantes;

forming an incision near the wrist of the patient to expose the radial artery and venae comitantes;

performing blunt tissue dissection along the course of one of the venae comitantes from wrist toward the elbow of the patient to form an anatomical space along the course of the one venae comitantes;

performing blunt tissue dissection along the course of another venae comitantes in the patient's forearm to form an anatomical space about the venae comitantes and radial artery along the course thereof from near the wrist toward the elbow of the patient;

occluding tributary vessels of the venae comitantes and radial artery within the anatomical space;

ligating the venae comitantes and radial artery at locations near the wrist and remote therefrom; and

severing the venae comitantes and radial artery for use of the radial artery as a bypass conduit.